

Romanian Energy Efficiency Finance Facility

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Full Eligibility Rules

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DEFINITIONS

Annual Energy Consumption ("AEC")	The total actual energy consumption expressed in MWh in an average year for heating, cooling, ventilation, hot water preparation, lighting, appliances, machinery, etc. It is calculated as the sum of the delivered energy and the energy produced and used on site for a sub-project including renewable forms, but excluding passive gains, collected per energyware. Energy delivered back to the market is not included. In case there is a variation of the production capacity of the industry as a consequence of the implementation of the Sub-project, the Annual Energy Consumption will be calculated per Unit of Production
Annual Energy Savings ("AES")	The amount of Annual Energy Consumption expected to be saved once the Sub-project is completed, expressed in MWh. In case there is a variation of the production capacity of the industry as a consequence of the implementation of the Sub-project, the Annual Energy Savings will be calculated per Unit of Production.
Carbon Dioxide Equivalent ("CDE")	The amount in metric tons obtained by multiplying the mass of emission of each greenhouse gas by the associated Global Warming Potential (GWP) of the gas.
Emissions Level (Initial) ("ELI")	CDE before the investment to which the Sub-project refers is made (in metric tons). In case there is a variation of the production capacity of the industry as a consequence of the implementation of the Sub-project, the ELI will be calculated per Unit of Production.
Emissions Level (Final) ("ELF")	CDE after the Sub-project has been completed, production capacity adjusted (in metric tons). In case there is a variation of the production capacity of the industry as a consequence of the implementation of the Sub-project, the ELF will be calculated per Unit of Production.

Emissions Reduction Ratio ("ERR") $ERR = (ELI - ELF) / ELI$

A clarification from EBRD of 18.2.1009 (applied thereafter) notes that the EC has instructed that only emissions reductions derived directly from the investment should be included in the calculation, such that emissions reductions derived from the reduced energy consumption (which is already recorded in the ESR) should not be included in the ERR.

The EEFF methodology for accounting for CO2 savings for the purposes of REUP is as follows:

- direct CO2 emissions savings that have a one-to-one ratio with on-site energy-savings are not taken into account when calculating the ISI;

- direct CO2 emissions savings that over-and-above this one-to-one ratio, which may occur as a result of switching to a fuel that emits different levels of CO2 emissions, are taken into account when calculating the ISI

- indirect CO2 emissions savings that occur off-site as a result of the on-site investment, which may reflect the inefficiencies of the national power system or an external heat network, are taken into account when calculating the ISI.

Energy Performance Certificate ("EPC")

A certificate which includes the Energy Performance Coefficient of a building as well as recommendations for its cost-effective improvement, as defined in the Directive on Energy Performance in Buildings.

Energy Performance Coefficient ("EPCo")

The ratio of the Annual Energy Consumption to the Actual Surface of the building expressed in KWh per square meter per annum.

Energy Performance Coefficient (Initial) ("EPCoI")

The EPCo calculated before the investment to which the Sub-project refers is made.

Energy Performance Coefficient (Final) ("EPCoF")

The EPCo calculated once the Sub-project has been implemented.

Energy Performance Indicator ("EPI")	Indicator to assess the eligibility of commercial building sector Sub-projects, calculated as: $EPI = (EPCoF - EPCoI) / EPCoI$.
Energy Saving Ratio in the Industry sector ("ESR")	$ESR = AES / AEC$
Global Warming Potential ("GWP")	For a greenhouse gas, the value in a relative scale that estimates how much a given mass of such a gas contributes to global warming as compared with the same mass of carbon dioxide, calculated over 100 years. The values of GWP are provided by the Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report (2001).
Industry Sector Indicator ("ISI")	$ISI = ESR + \frac{1}{2} ERR$
Unit of Production	A real or estimated unit that reasonably measures the production of the industry for which the Sub-borrower has requested financing under the EUEEFF.

ELIGIBILITY

Sub-projects must comply with certain minimum requirements that refer to:

- The energy savings and environmental benefits from the Sub-project using an appropriate Industry Sector Indicator (ISI) which is calculated by the Project Consultant. The ISI is calculated on the basis of the reduction of the annual energy consumption expected to be saved once the sub-project is completed and the associated reduction of CO₂ and other greenhouse gasses. In case there is a variation of the production capacity of the industry as a consequence of the implementation of the sub-project, the energy savings and the environmental benefits will be calculated per Unit of Production. **In any case the ISI shall be no less than 0.20.**
- The energy saving of a commercial building Sub-project, expressed as an Energy Performance Indicator ("EPI") which is calculated by the Consultant, shall be greater than or equal to the national requirements for this type of project. In the absence of a national requirement, **the EPI shall be no less than 0.30.**
- For Buildings Sector Sub-projects, the documentation attesting the eligibility of the Sub- project shall include an Energy Performance Certificate ("EPC") of the buildings, that require such document, according to the national legislation, prepared by the PC or an independent qualified energy expert, accredited by the Romanian national authorities as applicable. The Energy Performance Certificate shall include recommendations for the cost-effective improvement of the energy performance of the building and an assessment of the energy performance rating of the building. Sub-projects related to administrative buildings regardless of their size will be subject to an EPC even though the local legislation does not expressly requires an EPC
- When a sub-project consists of both equipment, technology and building-related energy efficiency investment component, the consultant will treat the two components of the project separately for the purpose of determining eligibility.
- **The Internal Rate of Return (IRR)** of the investment of the sub-project, as calculated by the Consultant that **must be at least 10%** unless otherwise agreed by EBRD and the PB. The IRR

is calculated on the basis of total investment cost (**free of VAT in the case of companies**) and the net annual revenues from energy savings or increased revenues from selling energy and reduction of other operating and maintenance costs, as a result of the implementation of the sub-project.

The PB may, on an exceptional basis, request the consent of EBRD in writing to finance the sub-project that may not reach the minimum energy saving requirements, indicating the reasons for its request, which may include for example the cost efficiency of energy savings to be achieved.

Examples of eligible Sub-projects include but are not limited to:

- On site co-generation of electricity and heat and/or cooling, including the necessary networks and internal installations for the use of the produced energy. Co-generation systems are defined according to the provisions of the Directive 2004/8/EC of the European Parliament as transposed into Romanian legislation by the Electricity Law no 13/2007.
- Replacement or rehabilitation of inefficient boilers, burners and auxiliary systems in order to improve energy efficiency, including resizing and rationalisation of thermal production systems, enhanced controls, economizers, improved insulation, regenerative burners, automatic blow-down, etc.
- Replacement of old gas boilers with condensing boilers.
- Rehabilitation of steam distribution systems including rationalisation of steam distribution piping, replacement/rehabilitation of inefficient steam using equipment, temperature controls, installation of steam traps, increased condensate recovery, etc.
- Installation of heat recovery from processes (e.g., installation of economizers for pre-heating purposes, heat recovery for space heating, heat recovery for drying, etc.)
- Switch from electricity heating to fuel based direct heating.
- Process improvements including process line modifications, enhanced controls etc. with clear energy efficiency benefits
- Installation of absorption chillers
- Installation of new chillers when this leads to energy efficiency improvements (e.g by replacing uncontrollable or inefficient decentralised units when justified)
- Replacement of oversized or inefficient electric motors with high efficiency ones
- Installation of Variable Speed Drives on selected electric motors

- Rehabilitation of compressed air systems (e.g., decentralisation and/or resizing of air compressors, replacing of old air compressors with new efficient ones, rehabilitation or compressed air systems)
- Rehabilitation of power distribution systems (e.g., replacement of old or oversized transformers, installation of capacitors to reduce reactive power consumption, etc.)
- Implementation of Energy Management Systems or Building Management Systems
- Implementation of energy saving measures in the built environment (e.g., insulation of walls, roofs and floors; installation of rolling doors; installation of new windows; installation of new heating and ventilation systems; installation of high energy efficiency lighting; etc.)

Examples of eligible buildings sector Sub-projects include but are not limited to:

- Replacement of old and low efficient boilers by new efficient ones with or without fuel switching;
- Implementation of on-site micro-cogeneration/tri-generation;
- Rehabilitation of heat substations and implementation of heat meters;
- Balancing of heating systems, implementation of individual heat control devices;
- Implementation of Building Management Systems;
- Replacement of existing windows with new, double-glazed windows, low-emission glazing;
- Thermal insulation of the building envelope (external walls, roofs, basements)
- Replacement of existing heating system with a new one (thermal insulation of pipes, tanks and machinery equipment);
- Installation of heat recovery from air ventilation system and/or processes (e.g. installation of economizers for pre-heating purposes);
- Replacement of existing low-efficient energy using processes (e.g.. cooling, washing, drying) with new, high efficient ones.
- Replacement of existing lighting with highly efficient lighting, dimming, daylight sensors, presence sensors, algorithmic lighting, grouping of luminaires;
- Free cooling;
- Compressor replacement/rehabilitation;
- Additional shading (jalousies, structural elements etc);
- Frequency modulation of pumps, fans, drives and motors;
- Variable air-volume air-conditioning systems;

- Installation of rolling doors;
- Implementation of renewable energy systems in buildings (e.g. solar thermal collectors, biomass boilers, geothermal energy utilisation for heating and/or cooling with or without heat pump, surface water energy utilisation for heating and/or cooling with heat pump, solar heating and/or cooling).

EEFF sub-loans shall not be used for:

- Investments in real estate solely with the aim of making short or medium term profit on sales;
- Financing of land purchase;
- Refinancing of existing debt of a sub-borrower.

An investment shall comply with the EBRD environmental policy (see **Annex** Environmental Exclusion and Referral list).

An investment shall comply with the relevant environmental legislation, especially but not restricted to the EC Habitats Directive¹ on the assessment of the effects of certain public and private projects on the environment. If a project is likely to affect sites of nature conservation importance as defined in the Habitats Directive, an appropriate assessment according to Art. 6 of the Habitats Directive shall be documented.

Environmental Exclusion and Referral List

- 1) The PB shall not finance the production of or trade in any product or activity deemed illegal under host country (i.e. national) laws or regulations, or international conventions and agreements.
- 2) Without limiting the generality of the above, the PB shall not finance the following activities:

¹ Council Directive (85/337/EEC) of 27 June 1985, OJ L 175, 5/7/1985, p. 40, as last amended by Directive 2003/35/EC, OJ L 156, 25.6.2003.

- a) Activities involving harmful or exploitative forms of forced labour/harmful child labour, discriminatory practices, or practices, which prevent employees from lawfully exercising their rights of association and collective bargaining.²
- b) Production or trade in or use of unbonded asbestos fibers or asbestos-containing products³
- c) Activities prohibited by host country legislation or international conventions relating to the protection of biodiversity resources or cultural heritage⁴
- d) Production or trade in products containing PCBs⁵
- e) Production or trade in pharmaceuticals, pesticides/herbicides and other hazardous substances subject to international phase-outs or bans⁶
- f) Production or trade in ozone depleting substances subject to international phase out⁷
- g) Trade in wildlife or wildlife products regulated under CITES⁸
- h) Drift net fishing in the marine environment using nets in excess of 2.5 km. in length
- i) Shipment of oil or other hazardous substances in tankers which do not comply with IMO requirements⁹

² Reference documents are the ILO Declaration on Fundamental Principles and Rights at Work, and the principles enshrined in the following conventions: ILO conventions 29 and 105 (forced and bonded labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour); Universal Declaration of Human Rights.

³ This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is <20%.

⁴ Relevant international conventions include, without limitation: Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention); Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention); Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention); World Heritage Convention; Convention on Biological Diversity.

⁵ PCBs: Polychlorinated biphenyls—a group of highly toxic chemicals. PCBs are likely to be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950-1985.

⁶ Reference documents are EU Regulation (EEC) No 2455/92 Concerning the Export and Import of Certain Dangerous Chemicals, as amended; UN Consolidated List of Products whose Consumption and/or Sale have been Banned, Withdrawn, Severely Restricted or not Approved by Governments; Convention on the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention); Stockholm Convention on Persistent Organic Pollutants; WHO Classification of Pesticides by Hazard.

⁷ Ozone Depleting Substances (ODSs): Chemical compounds which react with and deplete stratospheric ozone, resulting in the widely publicised ‘ozone holes’. The Montreal Protocol lists ODSs and their target reduction and phase out dates. A list of the chemical compounds regulated by the Montreal Protocol, which includes aerosols, refrigerants, foam blowing agents, solvents, and fire protection agents, together with details of signatory countries and phase out target dates, is available from the EBRD.

⁸ CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora. A list of CITES listed species is available from the EBRD.

- 3) The PB shall not finance the following activities without the prior written approval of the EBRD:
- a) Production or trade of radioactive materials including storage and treatment of radioactive wastes¹⁰
 - b) Hazardous waste storage, treatment or disposal
 - c) Energy generation using nuclear fuels
 - d) Trans-boundary trade in waste or waste products
 - e) Release of genetically modified organisms into the natural environment, and trade in GMOs.
 - f) Construction or major extension of large dams and reservoirs
 - g) Mining and oil and gas production and processing
 - h) Steel production using open hearth furnaces
 - i) Aluminium production using Søderberg electrolysis
 - j) Activities within, adjacent to, or upstream of land occupied by indigenous peoples' such as lands used for subsistence activities such as livestock grazing or hunting
 - k) Activities within, adjacent to, or upstream of designated protected areas under national law or international conventions, sites of scientific interest, habitats of rare/endangered species, and primary/old growth forests of ecological significance¹¹
 - l) Activities which may affect adversely sites of cultural or archaeological

⁹ This includes: tankers which do not have all required MARPOL SOLAS certificates (including, without limitation, ISM Code compliance), tankers blacklisted by the European Union or banned by the Paris Memorandum of Understanding on Port State Control (Paris MOU), and tankers due for phase out under MARPOL regulation 13G. No single hull tanker over 25 years old should be used.

¹⁰ This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where, in the opinion of EBRD, the radioactive source is trivial and/or adequately shielded.

¹¹ Principal reference documents are the IUCN Guidelines on Protected Areas